

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, I. R. TANNEHILL in charge]

NORTH ATLANTIC OCEAN, MARCH 1938

By H. C. HUNTER

Atmospheric pressure.—Pressure averaged much higher than normal over waters adjacent to the southern portions of the British Isles and thence southward to the vicinity of the Iberian peninsula; and it slightly exceeded normal from latitude 45° southward over the central longitudes of the ocean, and over most of the region of the West Indies. A small deficiency appeared around Bermuda and thence northwestward to the coasts of New England and the Canadian Maritime Provinces. Near Greenland and Iceland a marked deficiency was recorded, being almost one-third of an inch at Reykjavik.

The extremes of pressure reported by vessels were 30.79 and 28.35 inches. The higher mark was noted on the 2d, about 200 miles to southwestward of the southwestern point of Ireland, by the Dutch motorship *Loosdrecht*. The lower mark was recorded on the American liner *Washington*, early on the 12th, near the southern tip of the Grand Banks.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, March, 1938

Stations	Average pressure	Departure	High-est	Date	Low-est	Date
	Inches	Inch	Inches		Inches	
Julianehaab, Greenland.....	29.48	-0.19	29.94	13	28.62	2
Reykjavik, Iceland.....	29.36	-.32	30.06	12	28.67	22
Lerwick, Shetland Islands.....	29.76	+.05	30.51	12	29.26	16
Valencia, Ireland.....	30.19	+.29	30.71	2	29.57	20
Lisbon, Portugal.....	30.23	+.23	30.42	1, 4	29.80	21
Madeira.....	30.11	+.10	30.27	1, 2	29.77	20
Horta, Azores.....	30.23	+.05	30.54	1	29.80	10
Belle Isle, Newfoundland.....	29.84	+.01	30.38	17	28.68	1
Halifax, Nova Scotia.....	29.95	-.01	30.34	16	29.24	6
Nantucket.....	29.97	-.01	30.37	30	29.43	1
Hatteras.....	30.06	+.02	30.40	28	29.54	10
Bermuda.....	30.12	+.02	30.30	14	29.80	12
Turks Island.....	30.08	+.06	30.17	9	30.00	25
Key West.....	30.06	+.01	30.27	8	29.92	17
New Orleans.....	30.02	-.02	30.48	7	29.80	16

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket and New Orleans, which are 24-hour corrected means.

Cyclones and gales.—During the first half of the month the North Atlantic had weather as severe as during any previous part of the winter season of 1937-38. After the 15th there was decidedly less storminess except over the far-northeastern region. For March 1938, there were altogether from the North Atlantic 3 reports of winds of force 12, and 13 of force 11.

As the month began, an important storm was central over the Gulf of St. Lawrence, with a southward-extending trough. The American steamship *Excambion*, from Gibraltar for Boston, met force 12 west wind on the 1st, when in about the longitude of Halifax. This low center moved northward to southern Greenland by the late hours of the 2d.

Following this storm, another vigorous disturbance crossed the Virginia coast eastward on the 3d, and moved to the vicinity of the southern Grand Banks by the morning of the 5th; thereafter it advanced northward to unite with another system of low pressure. Numerous vessels reported intense gales in connection with this disturbance, though the highest force was only 11.

On the 9th, when a narrow trough stretched to southward from a low over southern Greenland, there was a 6-inch snowfall within two forenoon hours on the deck of the German liner *Hansa*, then west-bound, off the Grand

Banks. The wind at the time of this snowfall was comparatively light.

A storm of marked importance was centered near Hatteras on the 10th, and traveled rapidly to the east-northeastward. Near the southern extremity of the Grand Banks, during the night of the 11-12th, the center of the storm deepened rapidly, and many vessels noted pressures lower than 29 inches, the barometer on the liner *Washington*, as already mentioned, reading 28.35 inches. Two American steamships, the *Swiftscout* and the *Black Condor*, had estimated force 12 winds in connection with this storm; and the American freighter *Aquarius*, bound from New Orleans to Liverpool, lost three members of her crew overboard, swept off the forward deck by an immense wave. Chart IX shows the situation on the 12th. During the 13th this storm became much weaker.

On the evening of the 12th a less important low center was north of Bermuda; it traveled eastward, at first nearly on the 40th parallel, then turned more to northward as it approached the longitude of the western Azores. Several vessels noted quite stormy weather in connection with this storm, which later united with the storm preceding it.

A low, central near Hatteras on the morning of the 18th, moved to near Sable Island on the 19th, and continued northeastward till it soon became part of a very large low system. Chart X shows the conditions on the 19th, when some vessels met strong gales in the area affected by this storm.

From the 21st to 25th there was very low pressure over most of the region from Iceland to the coast of Norway. Press reports indicate that winds of hurricane force were met not far from the Norwegian coast, and that many fishermen perished.

On the last day of the month a storm between Bermuda and the Azores developed considerable strength, and one vessel encountered force 11 wind late on the 31st, when nearly a thousand miles to east-northeastward of Bermuda.

Fog.—Over waters near the American coast from Texas to Cape Cod there was about as much fog during March as there had been during February; but from Cape Cod to northwestern Europe nearly all areas had a considerable increase in foginess.

Again this month, there was no 5-degree square in North Atlantic areas which closely approached for number of days with fog the northwestern Gulf of Mexico, where 12 days had fog between 25° and 30° N., 90° and 95° W. Near and for moderate distances to eastward of Chesapeake and Delaware Bays there was fog on 8 days. Off New England and Nova Scotia fog was less prevalent than this, and was less frequent than is usual in March. In most of the Grand Banks area likewise fog was not so prevalent as usual during March, although the square 40° to 45° N., 45° to 50° W. is indicated as having 9 days, all of them either before the 9th or after the 18th.

Along the chief steamship lanes to northwestern Europe the portion between the 40th and 10th meridians had scarcely any fog before the 22d, but considerable afterward.

There was much fog at different times during the month over waters adjacent to the western coast of Europe and the British Isles. In the latter section the notable foggy periods seem to have centered around the 6th, 13th, and 23d; and there were at least 6 serious collisions, in which 3 comparatively small vessels were sunk, apparently without loss of life.